



**Commentaries on the Signature Project:
"Addressing Labor Shortages Due to
Low Birth Rates and Aging Population
in the APEC Region"**

**Challenges and Policy Directions for Sustaining
Economic Growth and Enhancing Productivity in an
Aging Society**

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SUMMARY

- Population serves a long-term and strategic role as a fundamental factor in economic development. China is undergoing profound changes unseen in a century featuring negative population growth and an aging population that are reshaping its economy's demographic foundations.
- To proactively address demographic challenges and population opportunities, the Chinese government has implemented strategic measures to improve the systems for supporting population development and providing related services. Sound systems will be instituted to provide full life-cycle population services to all, ensuring people's access to childcare, childbirth support and elderly care.
- The approach of supporting Chinese modernization through high-quality population development reflects a scientific understanding of the relationship between population and socioeconomic progress. It emphasizes shaping modern human resources with excellent quality and sufficient quantity into optimized structures and rationally distributing them to support China's modernization.

Increasing productivity

The slump in the labor force and the improvement in human capital, alongside the deep integration of digital intelligence, collectively form the foundations of China's economic and social development. From the perspective of economic growth input, China's demographics have witnessed a year-on-year decrease in the working-age population and a continuous improvement in overall workforce quality, as well as the implementation of a delayed retirement policy. The demographic driving force behind economic development is thus shifting from human resources to human capital. In response to the new wave of technological revolution and industrial transformation, the model of economic growth is transitioning from population factor input to innovation-driven growth, from high labor participation rates to high labor productivity.

The economic transformation has benefited from the expansion of higher

education enrollment as China has achieved the transition from elite education to public education. From 1981 to 2023, China's gross enrollment ratio in higher education increased from 1.6% to 60.2%. The number of people with higher education increased from 6.02 million to 250 million. In 2019, enrollment in higher education exceeded 10 million people. In 2022, the number of graduates from higher education that year surpassed 10 million. In 2023, the total number of students enrolled in higher education reached 47.63 million, ranking first in the world. It is expected that the number of university graduates in China will remain above 10 million per year until 2030. This marks a shift from rapid growth to high-quality development. By 2023, the scale of China's digital economy had reached 53.9 trillion yuan, accounting for 42.8% of GDP, which represents a transformation from "made in China" to "created in China".

Recovering birth rates

The inevitable consequence of long-term low birth rates is population aging, with the shrinking of the working-age population being one of its most significant indicators. China has endured low birth rates for 32 years. The total fertility rate dropped from 2.1 in 1991 to 1.0 in 2024, giving China one of the world's lowest fertility rates. Similar to many other East Asian economies, China features near-universal marital childbearing, where the marriage rate is closely correlated with the low fertility rates. From 2013 to 2024, the number of marriage registrations in China continuously declined from 13.469 million to 6.106 million, while the average age at which women first married rose above 28 years old.

Boasting the largest elderly population and the fastest population aging rate, China is set to enter a stage of high-level population aging. In 2024, the population aged 60 and above exceeded 310 million, creating a population aging rate of 22%. According to United Nations projections (<https://population.un.org/wpp/>), the elderly population is expected to peak at 510 million in 2054, with the aging rate rising to 42.2%¹. At that time,

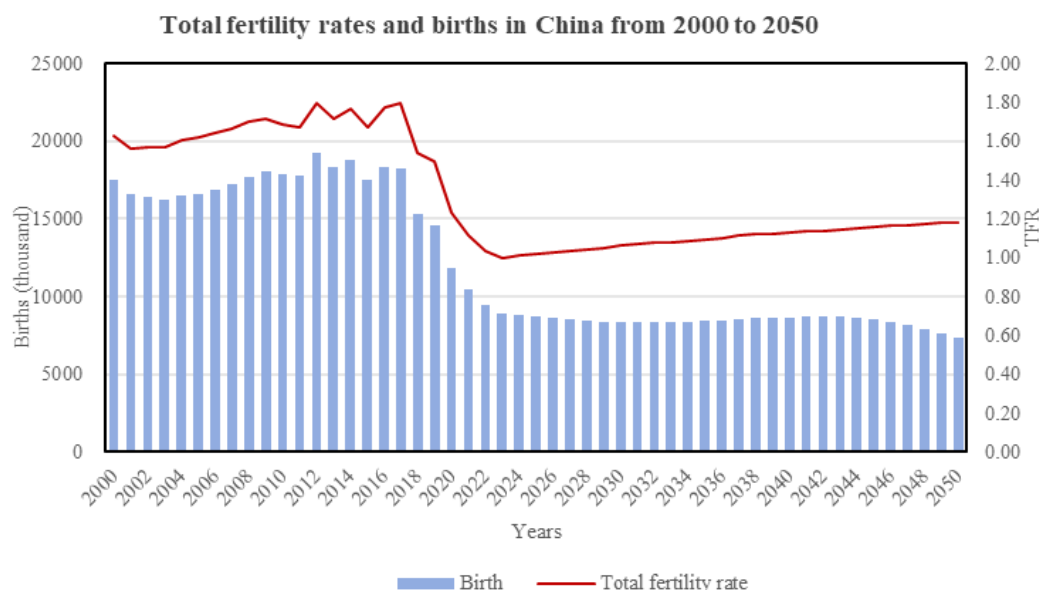
¹ All data sourced from United Nations, Department of Economic and Social Affairs, Population Division (2024). World Population Prospects 2024, Online Edition. <https://population.un.org/wpp/>

China will have the largest elderly population in the world as well as one of the highest levels of aging. One in every four elderly people worldwide will live in China, a phenomenon unseen in the course of human development.

In response, China will implement systems to support population development and provide related services, among them policy guarantees, economic incentives, time support, technological assistance, quality services, cultural care, and environmentally friendly initiatives. For example, most provinces extend maternity leave to 158-178 days and offer paternity leave of 20-30 days. Under the Personal Income Tax Law, families with children aged 0-3, children in full-time education, and elderly people 60 years of age or older are entitled to special tax deductions. In addition, various provinces have established maternity allowance systems with different standards, providing cash subsidies to families who give birth to children.

Simultaneously, the Chinese government will consider tackling population aging as a strategic economic priority, with a strong focus on developing the silver-hair economy. The government has prioritized the development of social welfare as the primary task in addressing aging. China has proposed establishing a basic service system that aims to keep the 90% of healthy elderly people at home while extending community assistance to the 7% of unhealthy elderly people and institutional care to the 3% of disabled elderly people. By the end of 2023, China had made available 8.23 million elderly care beds, completed age-friendly home modifications for 1.48 million elderly households, and established 235,000 home care beds to provide elderly people with door-to-door services.

Figure 1. Total fertility rates and births in China from 2000 to 2050



Source : United Nations, Department of Economic and Social Affairs, Population Division (2024).

World Population Prospects 2024, Online Edition. <https://population.un.org/wpp/> ; the data after 2024 are projections.

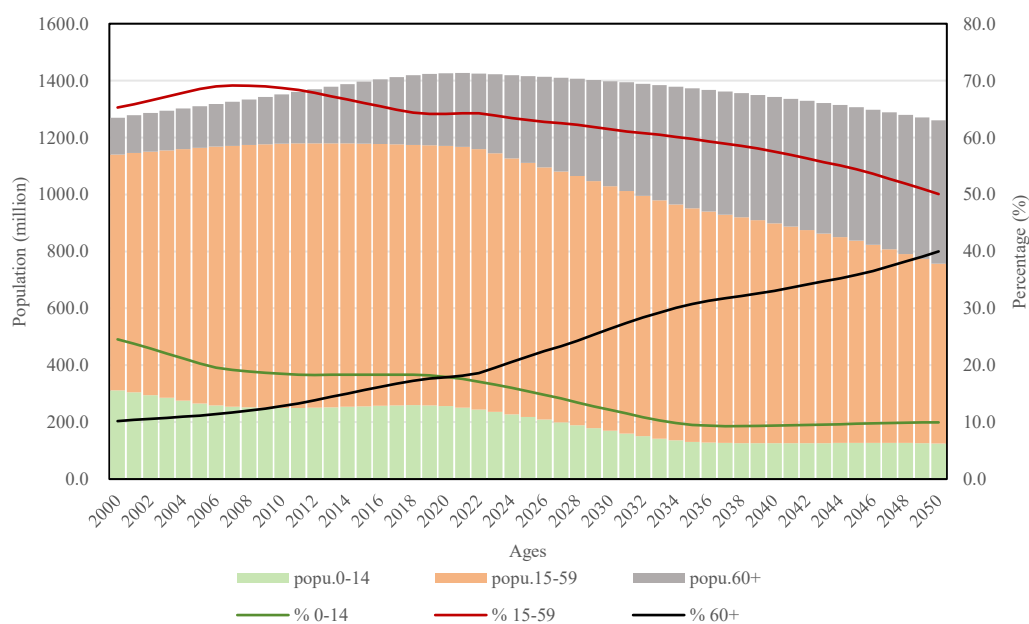
Human resource and skill development

On the one hand, China's labor resources remain relatively abundant, although its working-age population has already peaked. The working-age population (between 15 and 59 years of age) topped out at 930 million in 2011, and had decreased to 880 million by 2024. According to United Nations projections (<https://population.un.org/wpp/>), it will further decline to 640 million by 2050. Nevertheless, China will remain among those economies richest in labor resources.

On the other hand, the quality of China's working-age population continues to improve. The numbers of annual enrollments and graduates in higher education have both surpassed 10 million, while those for vocational and technical middle schools now exceed five million. The gross enrollment rate in higher education reached 60.2% in 2024.

The total number of people having received higher education is over 250 million, accounting for 17.7% of the total population. The average years of education for newly recruited workers stands at 14 years. According to World Bank statistics (<https://data.worldbank.org.cn/indicator/>), the female labor force participation rate in China has held steady around 70%, fully epitomizing the significant role of gender-based demographic dividends in economic development. China's new demographic dividends will continue growing stronger as digital intelligence and technology advance, coupled with long-term economic strategies such as ensuring full employment, rejuvenating the economy through science and education, and building a talent-powered economy. These new dividends, overlapping with the remnant traditional demographic dividends, will serve as the new driver for high-quality development in the future.

Figure 2. Population changes by age group in China from 2000 to 2050



Source : United Nations, Department of Economic and Social Affairs, Population Division (2024). World Population Prospects 2024, Online Edition. <https://population.un.org/wpp/>; the data after 2024 are projections.

Cross-border migration of skilled labor

International migration is an effective strategy for most developed economies to address labor shortages caused by declining birth rates and population aging. However, China's population stood at 1.41 billion in 2024, accounting for 17.5% of the global population. Given China's massive populace, discussions on international migration may still be premature. The Chinese government introduced *Measures for the Administration of Examination and Approval of Foreigners' Permanent Residence in China* in 2003 and established the National Immigration Administration in 2018; the *Regulations of the People's Republic of China on Administration of the Entry and Exit of Foreigners* was issued in 2013. By 2020, 846,000 foreigners were residing in mainland China, primarily for business, employment, and education. Looking ahead, China should draw on the experiences of developed economies to improve its laws and policies related to international migration.

Promoting social security systems by achieving UHC

China's average life expectancy at birth has now risen to 79.0 years, marking an era of longevity. Since the 1990s, China has continuously deepened reforms in its social pension system and made elderly care services accessible. A multi-pillar and multi-tiered system for old-age insurance has been developed in which the government, employers, families, and individuals all share responsibilities. Basic medical insurance has established universal coverage. In terms of elderly care services, China is committed to creating a coordinated home-community-institution-based elderly care system that integrates medical and health services with rehabilitation and wellness support. A list of basic elderly care services available nationally has been proposed, aiming to cover all elderly citizens and establish clear responsibilities, appropriate guarantees, and sustainability. Long-term care insurance, as an important supplement to the social security system, is currently being extended in the second phase of its pilot program to 180 million people in 49 cities. Both urban and rural social security systems continue to improve.